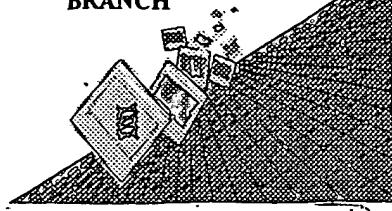


2/5/2

05/05

BIOTECHNOLOGY  
SYSTEMS  
BRANCH



## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/023,909

Source: OPIE

Date Processed by STIC: 1/16/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom, including:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE)

2. U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202

3. Hand Carry directly to:

U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name,  
Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202

Or

U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two,  
2011 South Clark Place, Arlington, VA 22202

4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office,  
Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

**Raw Sequence Listing Error Summary**

<u>ERROR DETECTED</u>	<u>SUGGESTED CORRECTION</u>	<u>SERIAL NUMBER:</u> <u>10/023,909</u>
<b>ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE</b>		
1 <input type="checkbox"/> Wrapped Nucleics <input type="checkbox"/> Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."	
2 <input type="checkbox"/> Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.	
3 <input type="checkbox"/> Misaligned Amino Numbering	The numbering under each 5 <sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.	
4 <input type="checkbox"/> Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.	
5 <input type="checkbox"/> Variable Length	Sequence(s) _____ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.	
6 <input type="checkbox"/> PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.	
7 <input type="checkbox"/> Skipped Sequences (OLD RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped  Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.	
8 <input type="checkbox"/> Skipped Sequences (NEW RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000	
9 <input type="checkbox"/> Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.	
10 <input type="checkbox"/> Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence <i>1-27 (and more)</i>	
11 <input type="checkbox"/> Use of <220>	Sequence(s) <i>1-27</i> missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)	
12 <input type="checkbox"/> PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.	
13 <input type="checkbox"/> Misuse of n	n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.	

OIPE

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/023,909

DATE: 01/16/2002  
TIME: 18:30:53

Input Set : A:\C1039-7058.txt  
Output Set: N:\CRF3\01162002\J023909.raw

```

3 <110> APPLICANT: Davis, Heather L.
4      Schorr, Joachim
5      Krieg, Arthur M.
7 <120> TITLE OF INVENTION: Use of Nucleic Acids Containing
8      Unmethylated CpG Dinucleotide as an Adjuvant
10 <130> FILE REFERENCE: C1039/7058/HCL
QF> 12 <140> CURRENT APPLICATION NUMBER: US/10/023,909
13 <141> CURRENT FILING DATE: 2001-12-18
15 <150> PRIOR APPLICATION NUMBER: US 09/325,193
16 <151> PRIOR FILING DATE: 1999-06-03
18 <150> PRIOR APPLICATION NUMBER: US 09/154,614
19 <151> PRIOR FILING DATE: 1998-09-16
21 <150> PRIOR APPLICATION NUMBER: PCT/US98/04703
22 <151> PRIOR FILING DATE: 1998-03-10
24 <150> PRIOR APPLICATION NUMBER: US 60/040,376
25 <151> PRIOR FILING DATE: 1997-03-10
27 <160> NUMBER OF SEQ ID NOS: 98
29 <170> SOFTWARE: FastSEQ for Windows Version 3.0
31 <210> SEQ ID NO: 1
32 <211> LENGTH: 15
33 <212> TYPE: DNA
34 <213> ORGANISM: Artificial Sequence
W--> 36 <220> FEATURE:
W--> 36 <223> OTHER INFORMATION:
36 <400> SEQUENCE: 1
37 gctagacgtt agcgt
39 <210> SEQ ID NO: 2
40 <211> LENGTH: 15
41 <212> TYPE: DNA
42 <213> ORGANISM: Artificial Sequence
W--> 44 <220> FEATURE:
W--> 44 <223> OTHER INFORMATION:
44 <400> SEQUENCE: 2
45 gctagatgtt agcgt
47 <210> SEQ ID NO: 3
48 <211> LENGTH: 15
49 <212> TYPE: DNA
50 <213> ORGANISM: Artificial Sequence
52 <220> FEATURE:
53 <221> NAME/KEY: modified_base
54 <222> LOCATION: (7)...(7)
55 <223> OTHER INFORMATION: m5c
57 <400> SEQUENCE: 3
58 gctagacgtt agcgt
60 <210> SEQ ID NO: 4
61 <211> LENGTH: 15
62 <212> TYPE: DNA

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Does Not Comply  
Corrected Diskette Needed

pp1-5

(global error)

see item 11 on Error Summary  
Sheet

15

15

15

15

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/023,909

DATE: 01/16/2002  
TIME: 18:30:53

Input Set : A:\C1039-7058.txt  
Output Set: N:\CRF3\01162002\J023909.raw

```

63 <213> ORGANISM: Artificial Sequence
65 <220> FEATURE:
66 <221> NAME/KEY: modified_base
67 <222> LOCATION: (13)...(13)
68 <223> OTHER INFORMATION: m5c
70 <400> SEQUENCE: 4
71   gcttagacgtt agcggt 15
73 <210> SEQ ID NO: 5
74 <211> LENGTH: 15
75 <212> TYPE: DNA
76 <213> ORGANISM: Artificial Sequence
W--> 78 <220> FEATURE:
W--> 78 <223> OTHER INFORMATION:
78 <400> SEQUENCE: 5
79   gcatgacgtt gagct 15
81 <210> SEQ ID NO: 6
82 <211> LENGTH: 20
83 <212> TYPE: DNA
84 <213> ORGANISM: Artificial Sequence
W--> 86 <220> FEATURE:
W--> 86 <223> OTHER INFORMATION:
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87   atggaaaggtc cagcggttctc 20
89 <210> SEQ ID NO: 7
90 <211> LENGTH: 20
91 <212> TYPE: DNA
92 <213> ORGANISM: Artificial Sequence
W--> 94 <220> FEATURE:
W--> 94 <223> OTHER INFORMATION:
94 <400> SEQUENCE: 7
95   atcgactctc gagcggttctc 20
97 <210> SEQ ID NO: 8
98 <211> LENGTH: 20
99 <212> TYPE: DNA
100 <213> ORGANISM: Artificial Sequence
102 <220> FEATURE:
103 <221> NAME/KEY: modified_base
104 <222> LOCATION: (3)...(3)
105 <223> OTHER INFORMATION: m5c
107 <400> SEQUENCE: 8
108   atcgactctc gagcggttctc 20
110 <210> SEQ ID NO: 9
111 <211> LENGTH: 20
112 <212> TYPE: DNA
113 <213> ORGANISM: Artificial Sequence
115 <220> FEATURE:
116 <221> NAME/KEY: modified_base
117 <222> LOCATION: (18)...(18)
118 <223> OTHER INFORMATION: m5c

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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/023,909

DATE: 01/16/2002  
TIME: 18:30:53

Input Set : A:\C1039-7058.txt  
Output Set: N:\CRF3\01162002\J023909.raw

```

120 <400> SEQUENCE: 9
121 atcgactctc gagcgttctc
123 <210> SEQ ID NO: 10
124 <211> LENGTH: 20
125 <212> TYPE: DNA
126 <213> ORGANISM: Artificial Sequence
W--> 128 <220> FEATURE:
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128 <400> SEQUENCE: 10
129 atgaaaggta caacgttctc
131 <210> SEQ ID NO: 11
132 <211> LENGTH: 20
133 <212> TYPE: DNA
134 <213> ORGANISM: Artificial Sequence
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W--> 136 <223> OTHER INFORMATION:
136 <400> SEQUENCE: 11
137 gagaacgctg gaccttccat
139 <210> SEQ ID NO: 12
140 <211> LENGTH: 20
141 <212> TYPE: DNA
142 <213> ORGANISM: Artificial Sequence
W--> 144 <220> FEATURE:
W--> 144 <223> OTHER INFORMATION:
144 <400> SEQUENCE: 12
145 gagaacgctc gaccttccat
147 <210> SEQ ID NO: 13
148 <211> LENGTH: 20
149 <212> TYPE: DNA
150 <213> ORGANISM: Artificial Sequence
W--> 152 <220> FEATURE:
W--> 152 <223> OTHER INFORMATION:
152 <400> SEQUENCE: 13
153 gagaacgctc gaccttcgat
155 <210> SEQ ID NO: 14
156 <211> LENGTH: 20
157 <212> TYPE: DNA
158 <213> ORGANISM: Artificial Sequence
160 <220> FEATURE:
161 <221> NAME/KEY: modified_base
162 <222> LOCATION: (14)...(14)
163 <223> OTHER INFORMATION: m5c
165 <400> SEQUENCE: 14
166 gagaacgctg gaccttccat
168 <210> SEQ ID NO: 15
169 <211> LENGTH: 20
170 <212> TYPE: DNA
171 <213> ORGANISM: Artificial Sequence
W--> 173 <220> FEATURE:

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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/023,909

DATE: 01/16/2002  
TIME: 18:30:53

Input Set : A:\C1039-7058.txt  
Output Set: N:\CRF3\01162002\J023909.raw

W--> 173 <223> OTHER INFORMATION:

173 <400> SEQUENCE: 15  
174 gagaacgatg gacccatcat  
176 <210> SEQ ID NO: 16  
177 <211> LENGTH: 20

20

178 <212> TYPE: DNA  
179 <213> ORGANISM: Artificial Sequence

W--> 181 <220> FEATURE:

W--> 181 <223> OTHER INFORMATION:

181 <400> SEQUENCE: 16  
182 gagaacgctc cagcactgat

20

184 <210> SEQ ID NO: 17  
185 <211> LENGTH: 20

186 <212> TYPE: DNA  
187 <213> ORGANISM: Artificial Sequence

W--> 189 <220> FEATURE:

W--> 189 <223> OTHER INFORMATION:

189 <400> SEQUENCE: 17  
190 tccatgtcgg tcctgatgct

20

192 <210> SEQ ID NO: 18  
193 <211> LENGTH: 20

194 <212> TYPE: DNA  
195 <213> ORGANISM: Artificial Sequence

197 <220> FEATURE:

198 <221> NAME/KEY: modified\_base

199 <222> LOCATION: (12)...(12)

200 <223> OTHER INFORMATION: m5c

202 <400> SEQUENCE: 18

20

203 tccatgtcgg tcctgatgct

205 <210> SEQ ID NO: 19  
206 <211> LENGTH: 20

207 <212> TYPE: DNA  
208 <213> ORGANISM: Artificial Sequence

W--> 210 <220> FEATURE:

W--> 210 <223> OTHER INFORMATION:

210 <400> SEQUENCE: 19  
211 tccatgacgt tcctgatgct

20

213 <210> SEQ ID NO: 20  
214 <211> LENGTH: 20

215 <212> TYPE: DNA  
216 <213> ORGANISM: Artificial Sequence

W--> 218 <220> FEATURE:

W--> 218 <223> OTHER INFORMATION:

218 <400> SEQUENCE: 20  
219 tccatgtcgg tcctgctgat

20

221 <210> SEQ ID NO: 21  
222 <211> LENGTH: 8

223 <212> TYPE: DNA  
224 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/023,909

DATE: 01/16/2002  
TIME: 18:30:53

Input Set : A:\C1039-7058.txt  
Output Set: N:\CRF3\01162002\J023909.raw

```

W--> 226 <220> FEATURE:
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226 <400> SEQUENCE: 21
227 tcaacgtt
229 <210> SEQ ID NO: 22
230 <211> LENGTH: 8
231 <212> TYPE: DNA
232 <213> ORGANISM: Artificial Sequence 8

W--> 234 <220> FEATURE:
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234 <400> SEQUENCE: 22
235 tcagcgct
237 <210> SEQ ID NO: 23
238 <211> LENGTH: 8
239 <212> TYPE: DNA
240 <213> ORGANISM: Artificial Sequence 8

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242 <400> SEQUENCE: 23
243 tcatcgat
245 <210> SEQ ID NO: 24
246 <211> LENGTH: 8
247 <212> TYPE: DNA
248 <213> ORGANISM: Artificial Sequence 8

W--> 250 <220> FEATURE:
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250 <400> SEQUENCE: 24
251 tcttcgaa
253 <210> SEQ ID NO: 25
254 <211> LENGTH: 7
255 <212> TYPE: DNA
256 <213> ORGANISM: Artificial Sequence 8

W--> 258 <220> FEATURE:
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258 <400> SEQUENCE: 25
259 caacgtt
261 <210> SEQ ID NO: 26
262 <211> LENGTH: 8
263 <212> TYPE: DNA
264 <213> ORGANISM: Artificial Sequence 7

W--> 266 <220> FEATURE:
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266 <400> SEQUENCE: 26
267 ccaacgtt
269 <210> SEQ ID NO: 27
270 <211> LENGTH: 8
271 <212> TYPE: DNA
272 <213> ORGANISM: Artificial Sequence 8

W--> 274 <220> FEATURE:

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↓  
The types of errors shown exist throughout  
the Sequence Listing. Please check subsequent  
sequences for similar errors.

## VERIFICATION SUMMARY

PATENT APPLICATION: US/10/023,909

DATE: 01/16/2002

TIME: 18:30:54

Input Set : A:\C1039-7058.txt

Output Set: N:\CRF3\01162002\J023909.raw

L:12 M:270 C: Current Application Number differs, Replaced Application Number  
L:36 M:258 W: Mandatory Feature missing, <220> FEATURE:  
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L:44 M:258 W: Mandatory Feature missing, <220> FEATURE:  
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L:266 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/023,909

DATE: 01/16/2002

TIME: 18:30:54

Input Set : A:\C1039-7058.txt

Output Set: N:\CRF3\01162002\J023909.raw

L:297 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:

L:305 M:258 W: Mandatory Feature missing, <220> FEATURE:

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